IN THE CLAIMS:

1. **(Currently Amended)** A method for driving a solid-state image pickup device which stores, in a plurality of photo-electric conversion units, signal charges corresponding to an incident light during a prescribed time period, each of said photo-electric conversion units being provided with an overflow drain (OFD) structure, excludes surplus charges by an electric potential barrier, said electric potential barrier being maintained between said OFD structure and each of said photo-electric conversion units, reads out, after cutting off said incident light by a cut-off means such as a mechanical shutter, said signal charges by grouping said photo-electric conversion units into a prescribed number of regions, and outputs image signal from all of the photo-electric conversion units by repeating the read-out procedures, which comprises the steps of:

cutting off said incident light;

raising up said electric potential barrier;

starting reading out said signal charges.

2. **(Currently Amended)** The method for driving a solid-state image pickup device according to Claim 1, wherein ~~the~~ said electric potential ~~of said electric potential~~ barrier during the read-out step is raised up by a voltage greater than 0.4.V.

3.-4. **(Canceled).**

5. **(Currently Amended)** The method for driving a solid-state image pickup device according to Claim 1, wherein ~~each of~~ said ~~photoelectric conversion units~~ OFD structure is ~~provided with~~ a vertical ~~overflow drain (OFD)~~ OFD structure which excludes the surplus charges by said electric potential barrier by a voltage applied to a substrate of said vertical OFD structure, which comprises the steps of:

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cutting off said incident light;

raising up said electric potential barrier;

starting reading out said signal charges.

6. **(Currently Amended)** The method for driving a solid-state image pickup device according to Claim 5, wherein ~~the~~ said electric potential ~~of said electric potential~~ barrier during the read-out step is raised up by a voltage greater than 0.4V.

7.-8. **(Canceled).**

9. **(Currently Amended)** The method for driving a solid-state image pickup device according to Claim 1, wherein ~~each of~~ said ~~photo-electric conversion units~~ OFD structure is ~~provided with~~ a horizontal ~~overflow drain (OFD)~~ OFD structure which excludes the surplus charges by said electric potential barrier by a voltage applied to a gate of said horizontal OFD structure, which comprises the steps of:

cutting off said incident light;

raising up said electric potential barrier;

starting reading out said signal charges.

10. (Currently Amended) The method for driving a solid-state image pickup device according to Claim 9, wherein ~~the electric potential of~~ said electric potential barrier during the read-out step is raised up by a voltage greater than 0.4V.

11.-12. (Canceled).